

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNALS AT THE INTERSECTIONS OF PENNSYLVANIA/MAUGANS AVENUE AND MACK TRUCK ROAD/MAUGANS AVENUE. NEW TRAFFIC SIGNALS WILL BE CONSTRUCTED AT THE INTERSECTIONS OF MAUGANS AVENUE AND THE INTERSTATE 81 RAMPS WITH FOUNDATIONS AND CONDUIT PLACED FOR FUTURE SIGNALS AT MAUGANS AVENUE AND CRAYTON BOULEVARD. MAUGANS AVENUE IS ASSUMES TO RUN IN A EAST-WEST DIRECTION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING EIGHT (8) NEMA PHASES. EXCLUSIVE/PERMISSIVE LEFT TURN PHASING WILL BE PROVIDED FOR ALL APPROACHES EXCEPT NORTHBOUND PENNSYLVANIA AVENUE WHICH HAS DUAL PROTECTED LEFTS. AUDIBLE PEDESTRIAN SIGNALS SHALL BE INSTALLED AROUND THE INTERSECTIONS AS SHOWN. SIDEWALKS WITH ADA RAMPS AND DETECTABLE WARNING SURFACE MATERIAL WILL ALSO BE INSTALLED. AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED WHERE CROSSWALKS ARE SHOWN.

INSTALL A FULL-TRAFFIC ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1) FOUR CHANNEL, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSSES IN A NEMA SIZE "6" BASE MOUNTED CABINET.

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY DAVE SHRADER OF THE WASHINGTON COUNTY HIGHWAY DEPARTMENT AT 240-313-2715 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SHRADER THE NEAREST STREET ADDRESSES, ZIP CODES, AND PHONE NUMBERS FOR EACH INTERSECTION.

THE TRAFFIC CONTROL PLANS PROVIDED WITHIN THIS SET OF CONSTRUCTION PLANS SHALL BE USED FOR THE PROJECT.

THE CONTACT PERSONS FOR THE WASHINGTON COUNTY ENGINEERING DEPARTMENT AS AS FOLLOWS:

MR. TBD
PROJECT MANAGER
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DESIGN ENGINEER
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MR. DAVE SHRADER
SIGNAL OPERATIONS
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DEPUTY CHIEF ENGINEER
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CONTACT PERSONS FOR MD-SHA ARE AS FOLLOWS:

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ASSISTANT DISTRICT ENGINEER - TRAFFIC
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CONTACT PERSONS FOR OOPS ARE AS FOLLOWS:

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CHIEF TRAFFIC OPERATIONS
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MR. MIKE STOCKER
SIGNAL SHOP WAREHOUSE
(410) 787-7696

A. EQUIPMENT TO BE SUPPLIED BY THE COUNTY

<u>QUANTITY</u>	<u>DESCRIPTION</u>
1 EACH	EIGHT PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN NEMA SIZE "6" BASE MOUNTED CABINET

129 S.F. SHEET ALUMINUM SIGNS TO CONSISTS OF:

- 2 EACH R-3 SIGN (30 IN. X 30 IN.) - MAST ARM MOUNT
- 5 EACH R-5L SIGN (30 IN. X 36 IN.) - MAST ARM MOUNT
- 3 EACH R-5R SIGN (30 IN. X 36 IN.) - MAST ARM MOUNT
- 1 EACH S-1 SIGN (30 IN. X 60 IN.) - MAST ARM MOUNT
- 1 EACH S-2 SIGN (32 IN. X 60 IN.) - MAST ARM MOUNT
- 3 EACH S-3 SIGN (32 IN. X 60 IN.) - MAST ARM MOUNT
- 2 EACH M1-4 N SIGN (24 IN. X 24 IN.) - MAST ARM MOUNT
- 2 EACH M1-4 F SIGN (36 IN. X 36 IN.) - MAST ARM MOUNT
- 2 EACH M1-11 F SIGN (36 IN. X 60 IN.) - MAST ARM MOUNT
- 2 EACH M7-5 F SIGN (9 IN. X 21 IN.) - MAST ARM MOUNT
- 6 EACH S-8 SIGN (9 IN. X 12 IN.) - POLE MOUNT

2 EACH VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS

C. EQUIPMENT TO BE REMOVED AND RETURNED TO THE COUNTY/SHA

COUNTY/SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

B. EQUIPMENT TO BE FURNISHED AND OR INSTALLED BY THE CONTRACTOR

QUANTITY	DESCRIPTION
LUMP SUM	MAINTENANCE OF TRAFFIC
20 C.Y.	TEST PIT EXCAVATION
LUMP SUM	REMOVE AND DISPOSE EXISTING MATERIAL AND EQUIPMENT
1 EACH	STEEL POLE WITH A 50 FT. SPECIAL MAST ARM
1 EACH	STEEL POLE WITH A 38 FT. AND A 70 FT. SPECIAL MAST ARM
1 EACH	STEEL POLE WITH A 38 FT. SPECIAL MAST ARM
2 EACH	STEEL PEDESTAL POLE
13 C.Y.	CONCRETE FOR SIGNAL FOUNDATIONS
620 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
1520 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
300 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
100 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
300 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
50 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
1 EACH	ELECTRICAL UTILITY SERVICE EQUIPMENT W/ 200 AMPS METER PEDESTAL
80 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
4 EACH	FURNISH AND INSTALL OPTICOM EMERGENCY VEHICLE PRE-EMPTION DETECTOR
14 EACH	FURNISH AND INSTALL HANDLE
127 S.F.	INSTALL OVERHEAD AND POLE MOUNTED SIGN
8 EACH	VIDEO DETECTION CAMERA
4 EACH	CONTROL CABLE, 200 FT, VIDEO CAMERA TO CONTROLLER
2 EACH	CONTROL CABLE, 250 FT, VIDEO CAMERA TO CONTROLLER
2 EACH	CONTROL CABLE, 350 FT, VIDEO CAMERA TO CONTROLLER
2 EACH	10 FT BREAKAWAY PEDESTAL
6 EACH	GROUND ROD - 0.75 INCH DIAMETER X 10 FT LENGTH
2 EACH	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION, MAST ARM MOUNTED
54 EACH	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION, MAST ARM MOUNTED
4 EACH	12 INCH PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNTED - LED COUNTDOWN
2 EACH	12 INCH PEDESTRIAN SIGNAL HEAD SECTION PEDESTAL MOUNTED - LED COUNTDOWN
870 L.F.	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
50 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
1850 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
1520 L.F.	ELECTRICAL CABLE - 24 CONDUCTOR (NO. 14 AWG)
6 EACH	PUSHBUTTON AND SIGN
1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT

TEAM LEADER - TRAFFIC ENGINEERING DESIGN DIVISION

(1/10/10)

ASSISTANT - TRAFFIC ENGINEERING DESIGN DIVISION

Quincy Hall 10/26/66

CHIEF - TRAFFIC ENGINEERING DESIGN DIVISION

Lee J. K. 10/27/02

SHA No.: BW707M83
Maughan's Avenue: I-81 to US 11

SHIA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

**MAUAGANS AVENUE / LONGMEADOW ROAD
AND PENNSYLVANIA AVENUE**

TRAFFIC SIGNAL PLANS

MAUGANS AVE. & PENNSYLVANIA AVE.					
RECONSTRUCTION					
SIGNAL PLANS - NOTES					
PENNSYLVANIA AVENUE					
SCALE AS SHOWN					
SHEET NO. SP-11					
PROJECT NO. 10-140					
DWG. NO. 68 OF 146					